

NAVAL TECHNICAL TRAINING COMMAND

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# **SCHEMATIC DIAGRAMS**

# **DEVICE 8H7**

**ADVANCED FIRST TERM AVIONICS COURSE**

**CNTT-M607 (Rev. 11/84)**

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**NAVAL AIR TECHNIC**  
**NAVAL AIR STATION MEN**

*For Training*



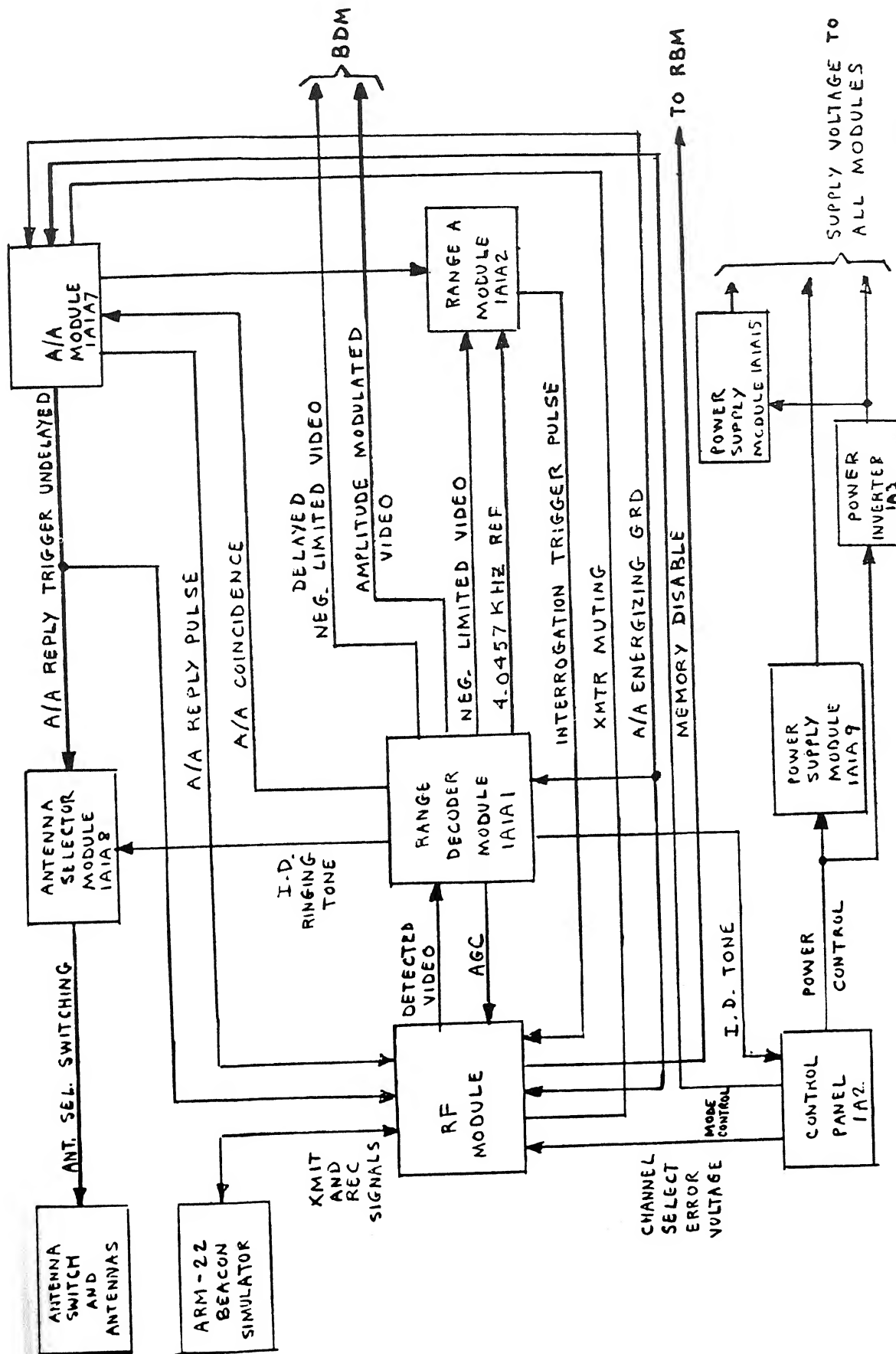
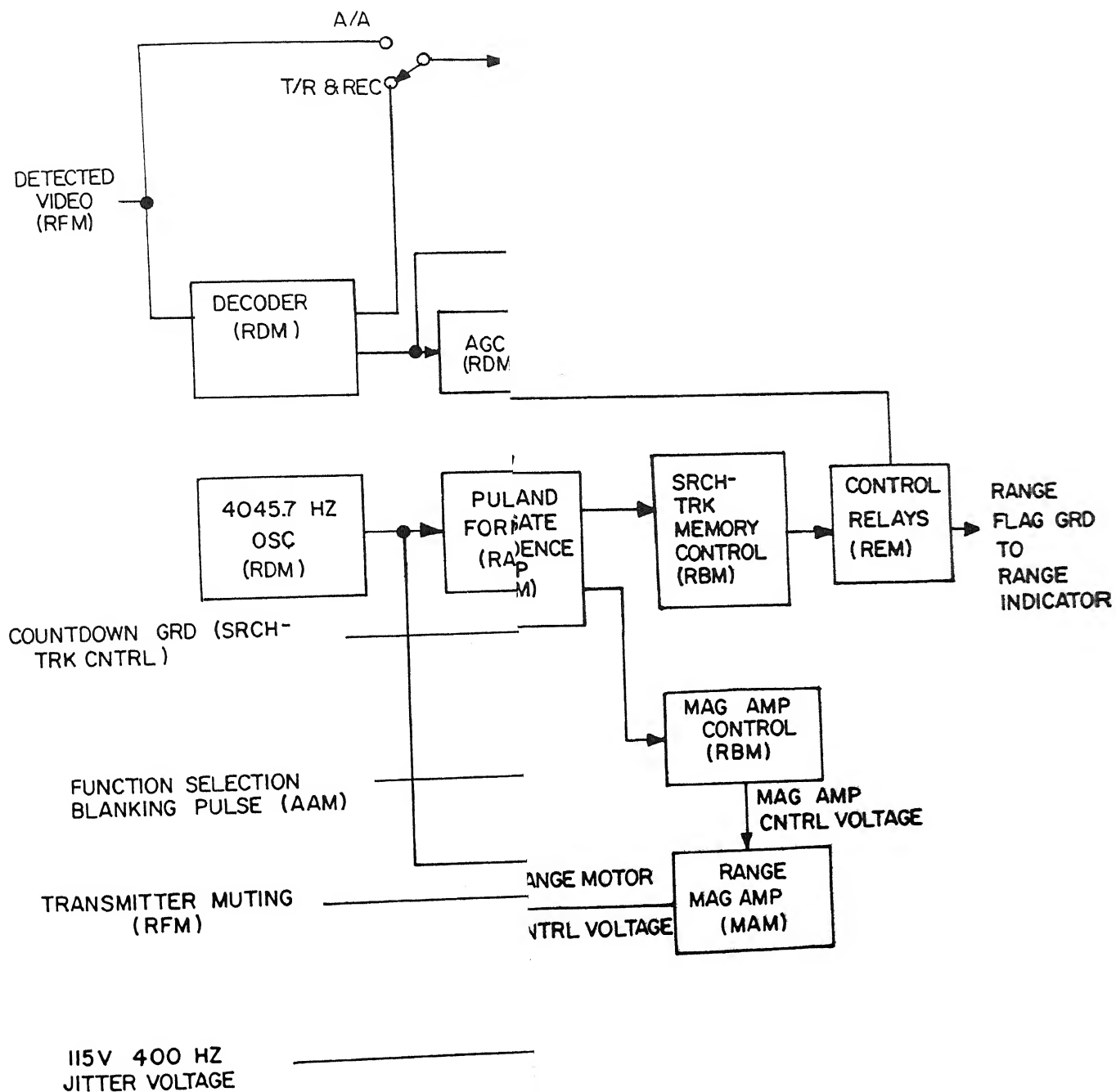


Figure 4-2. Receive-Transmit Function, Block Diagram





1. Ranging System, Simplified Block Diagram

4-37

3

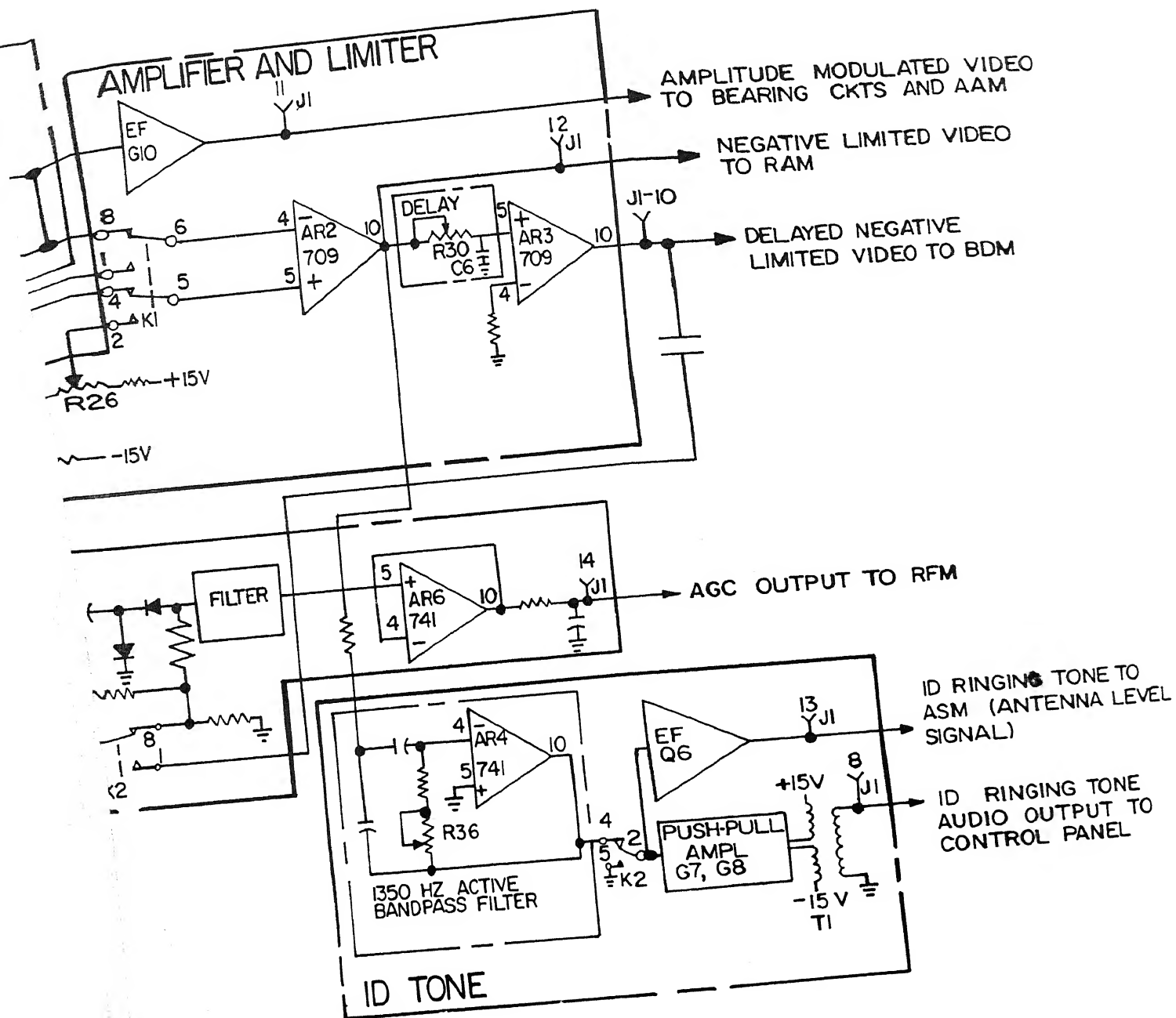
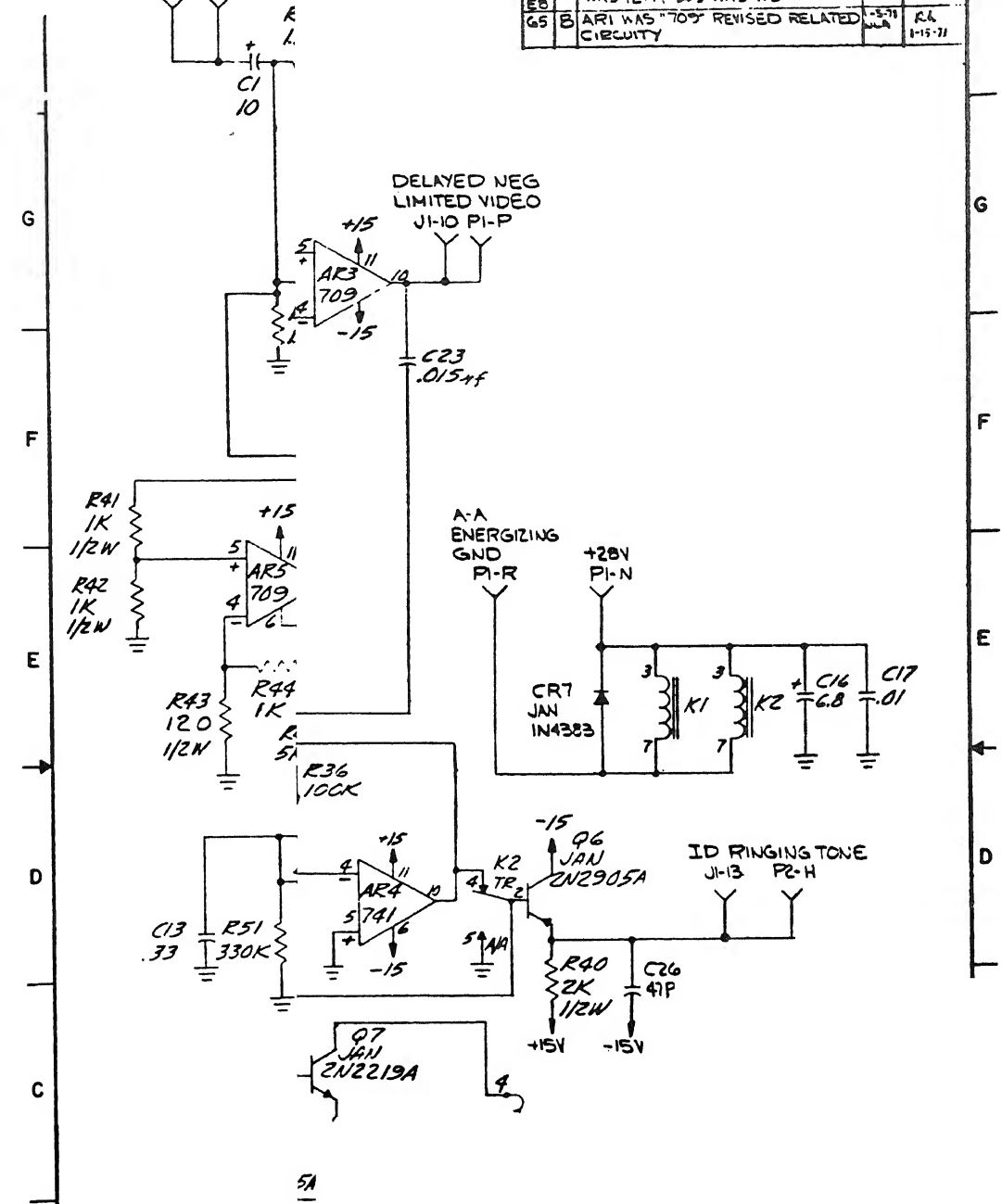


Figure 4-11. Range Decoder Module 1A1A1, Functional Block Diagram

4-39

4

		REVISIONS		DATE	APPROVED
ZONE	LTR	DESCRIPTION			
G2	A	ADDED C26, C6 WAS .0033, C10 WAS .01, C41S .22, R43 WAS 220, R48 WAS 12M, R49 WAS 1.8M		1-15-71	RL
G5	B	ARI WAS .705, REVISED RELATED CIRCUITY		1-15-71	RL



NOTES:  
 1. UNLESS OTHERWISE SPECIFIED  
 FOR RESISTOR, 100  
 OR MICROFAR  
 - 1/4 WATT, 5%  
 2. ALL REFERENCE  
 FOR COMPLETE

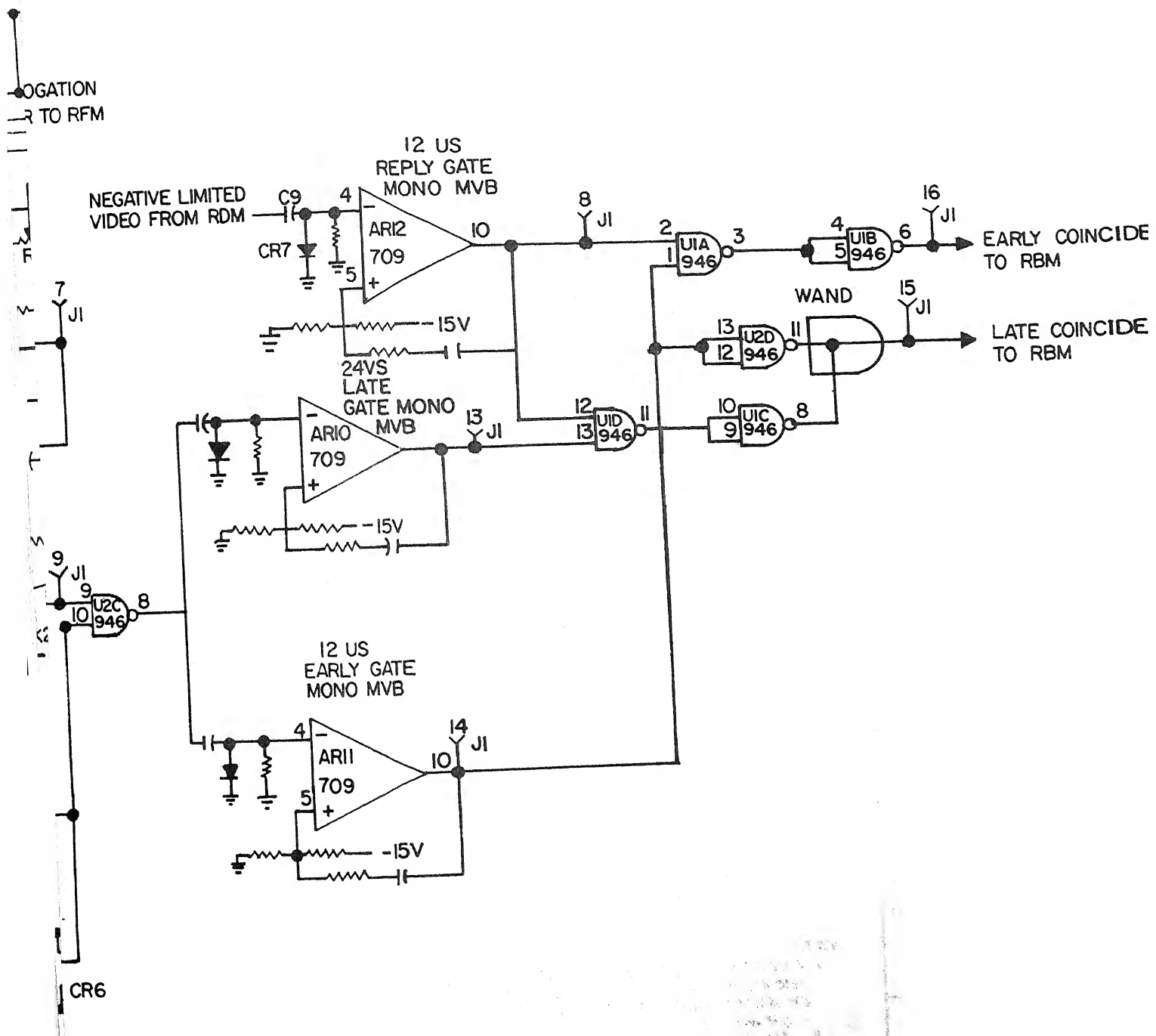
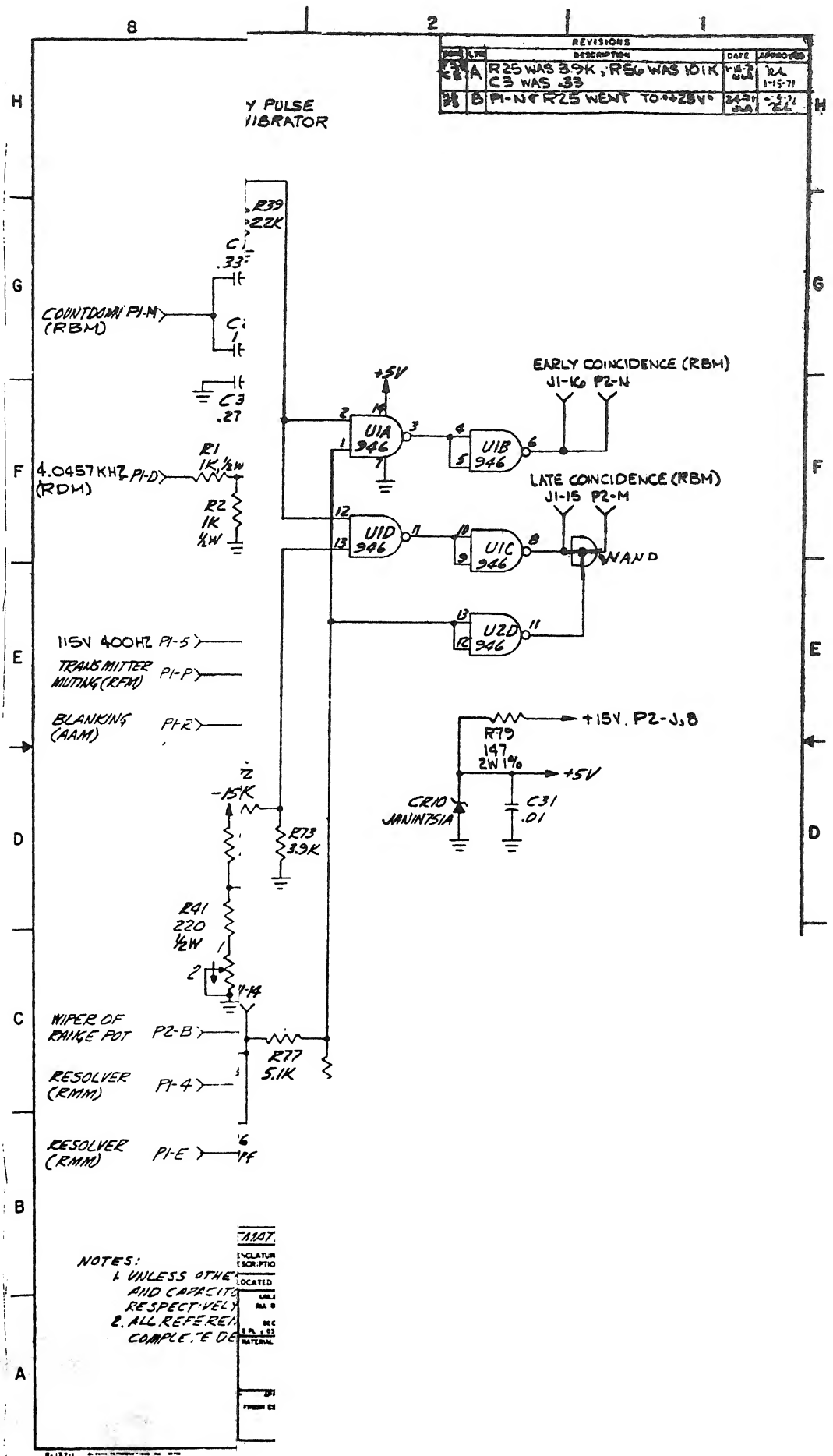


Figure 4-12. Range A Module 1A1A2, Functional Block Diagram





RELAY	SEARCH	LATE	TRACK	MEMORY
K2	ON	ON	OFF	ON
K1 K3, K4	ON	OFF	OFF	OFF
K5, K6	OFF	ON	ON	ON

NOTE: ALL RELAYS SHOWN IN OFF (DEENERGIZED) POSITION.

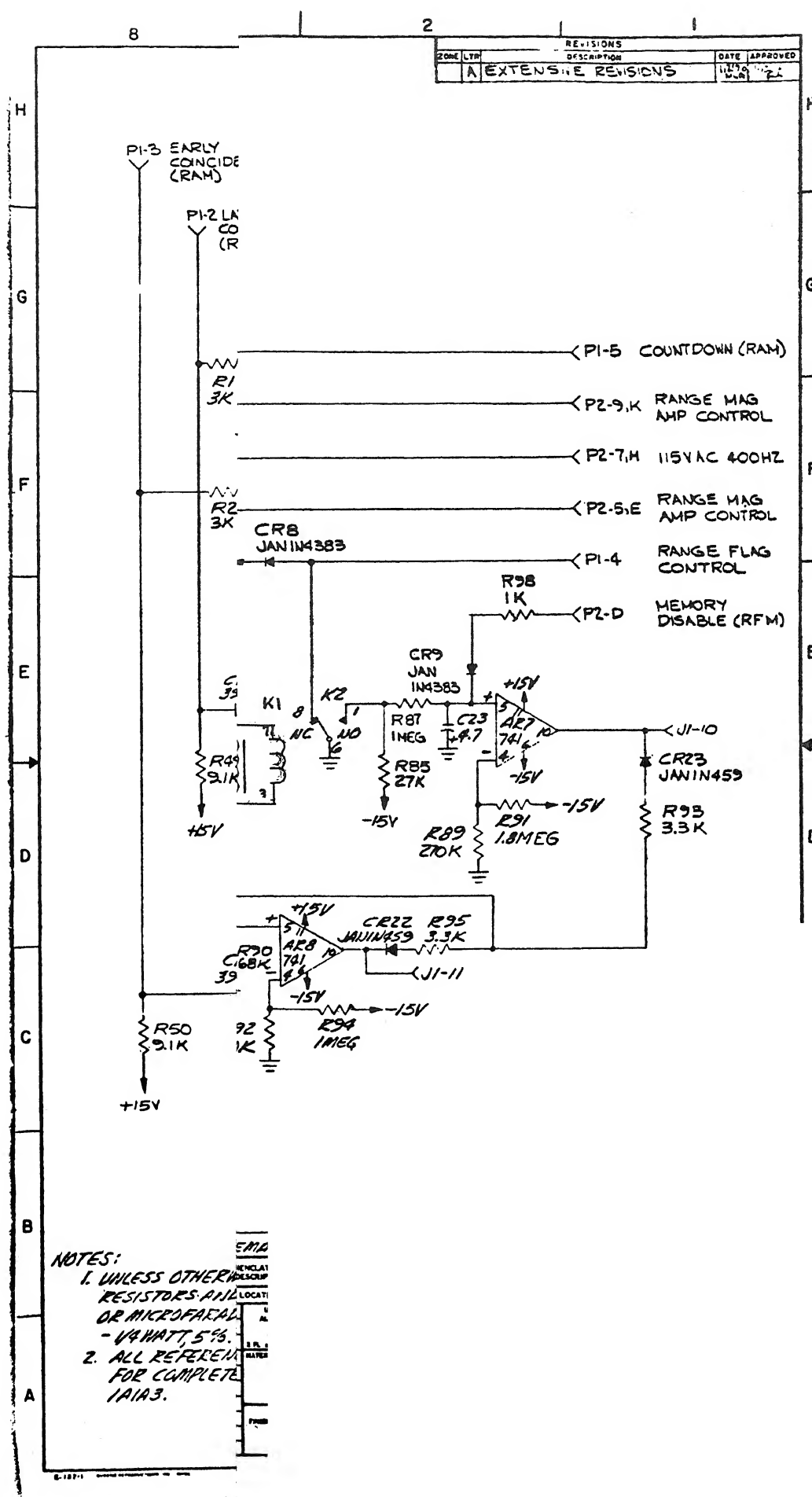
TO MAG AMP

COUNTDOWN GRD TO RAM

FLAG OPER TO CONTROL PANEL RANGE INDICATOR

Figure 4-13. Range B Module, Functional Block Diagram

Figure 4-13. Range B Module,  
Functional Block Diagram



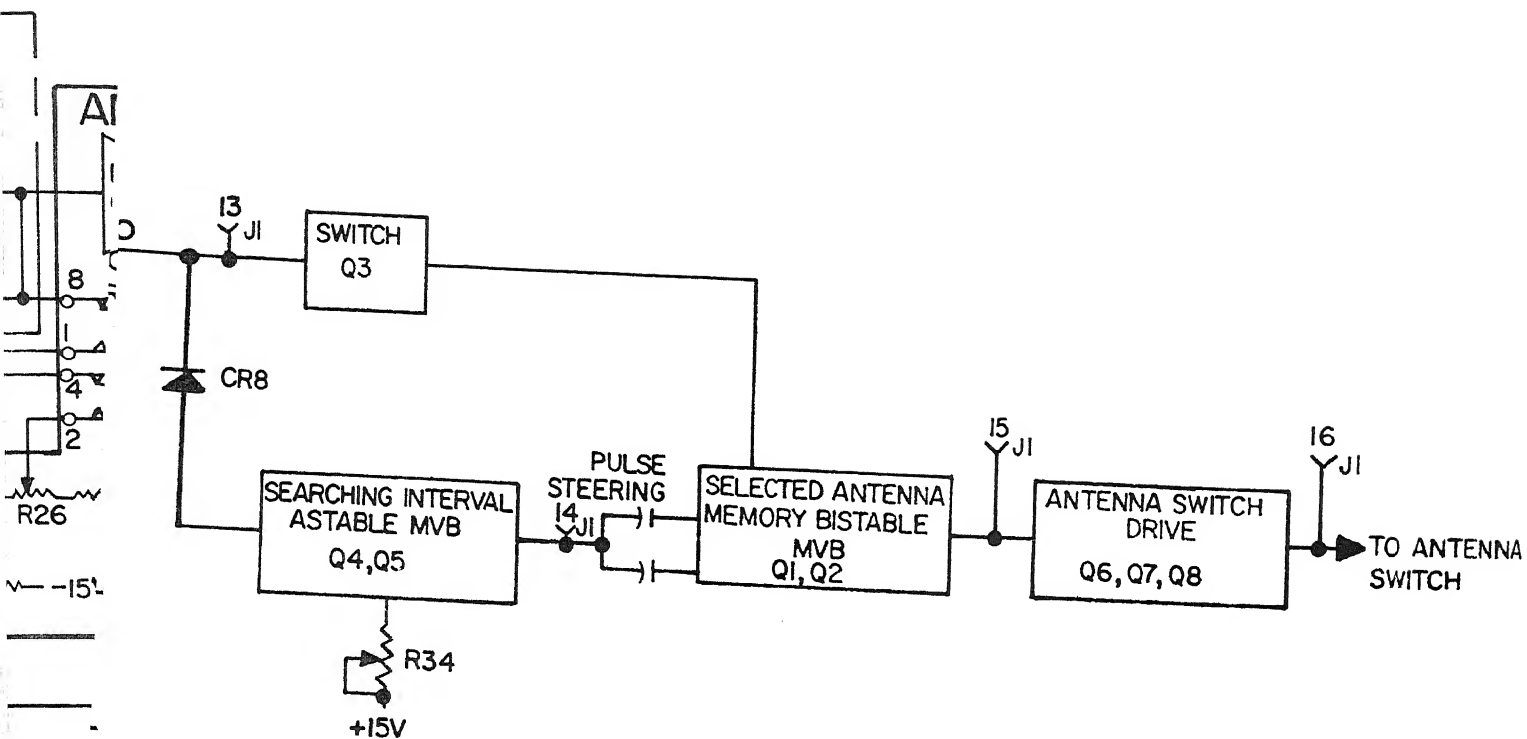
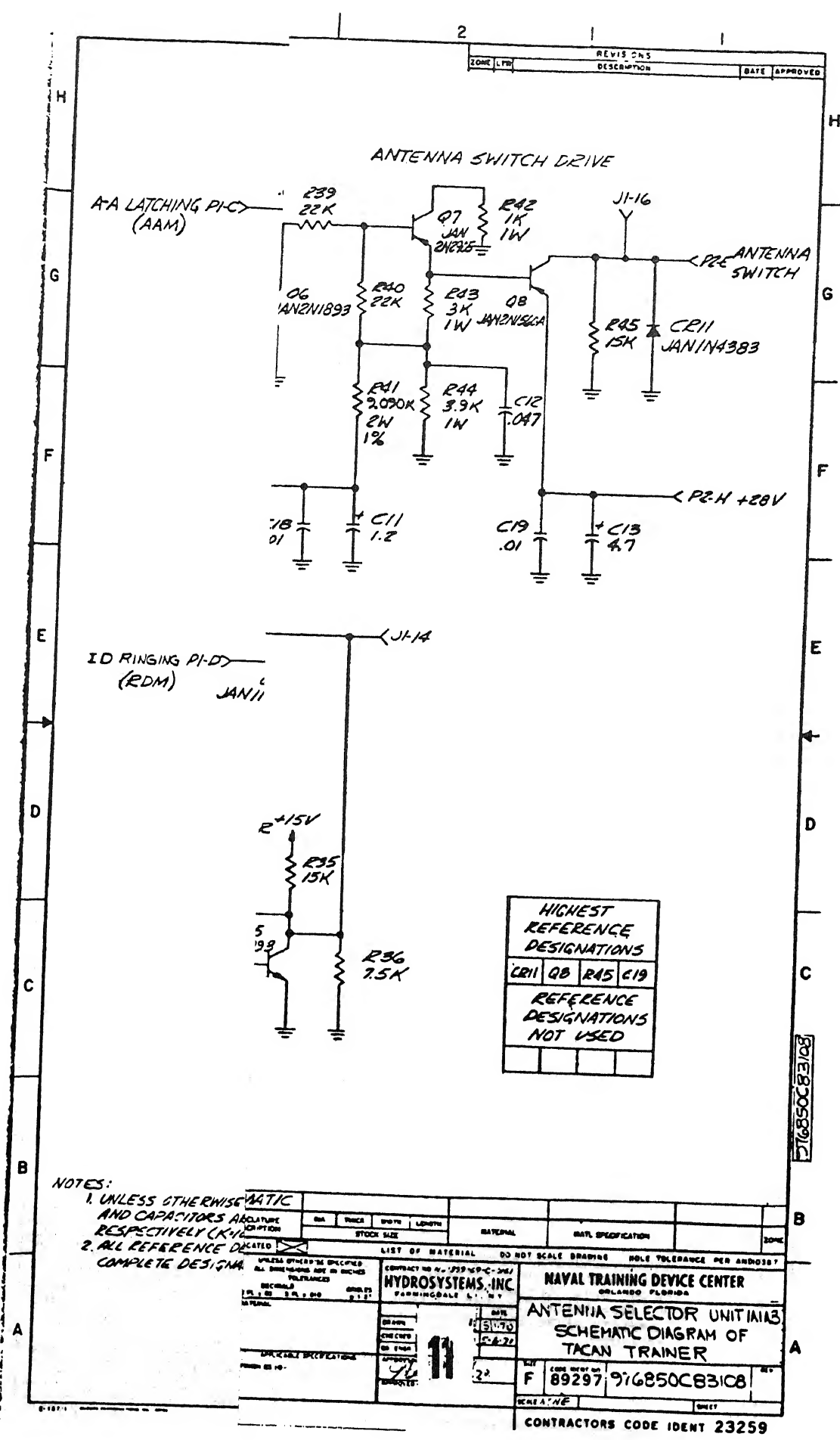


Figure 4-9. Antenna Selector Module IAIA8, Functional Block Diagram



HIGHEST REFERENCE DESIGNATIONS			
CR11	QB	R45	C19
REFERENCE DESIGNATIONS NOT USED			

NOTES:  
 1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.  
 2. ALL REFERENCE DESIGNATIONS ARE TO BE USED IN THE COMPLETE DESIGN.

DATE	THICK	DEPTH	LENGTH	WATERLINE	WATER SPECIFICATION	ZONE

LIST OF MATERIAL DO NOT SCALE DRAWING HOLE TOLERANCE PER ANSI B18.2

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS DECIMALS ANGLES

CONTRACT NO. 1799-NP-C-265  
**HYDROSYSTEMS, INC.**  
 FARMINGDALE, L.I., N.Y.

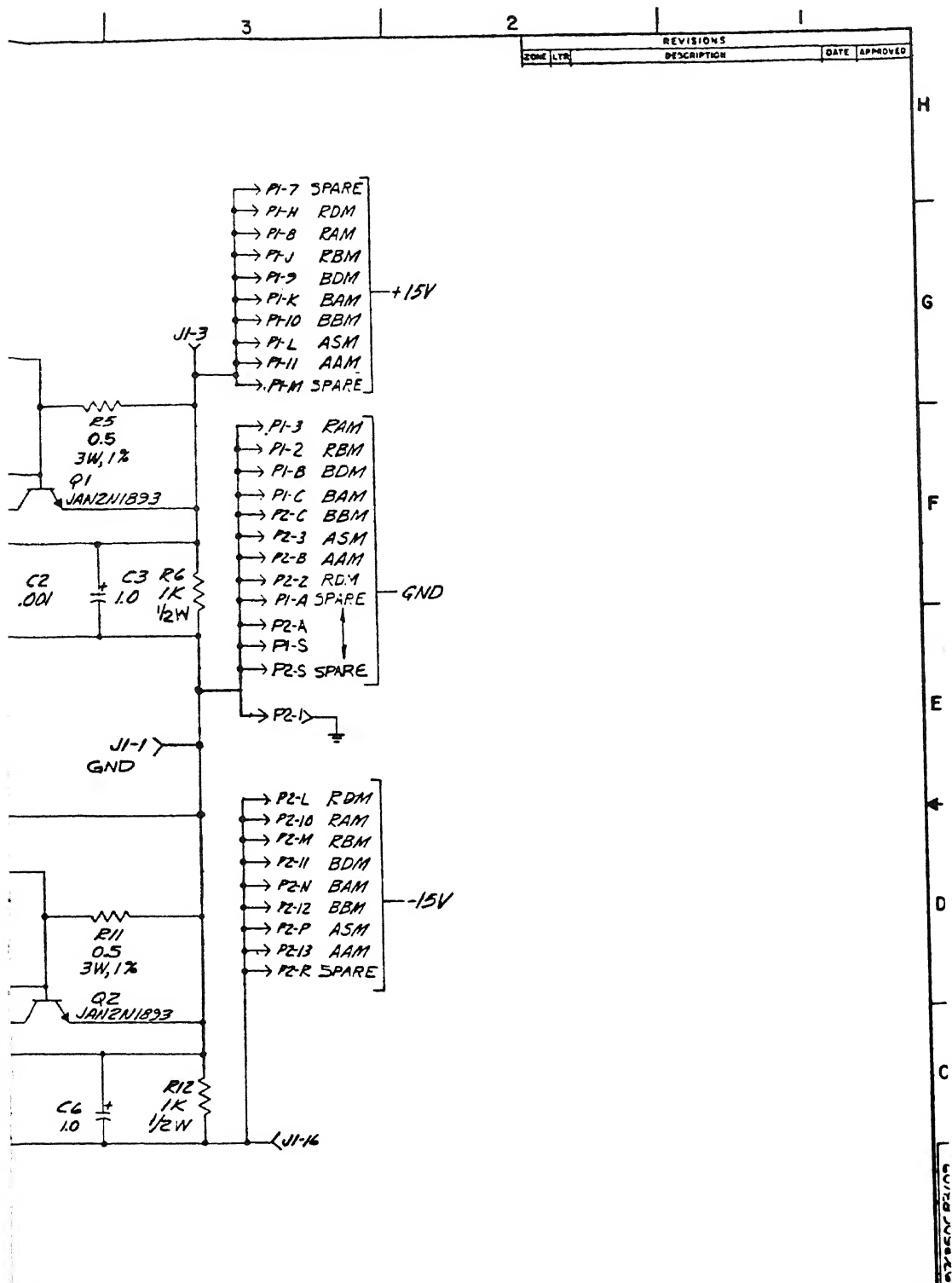
DATE: 3-1-70  
 DRAWN BY: 11  
 CHECKED BY: 11  
 APPROVED BY: 11

NAVAL TRAINING DEVICE CENTER  
 ORLANDO, FLORIDA

**ANTENNA SELECTOR UNIT 1A13**  
**SCHEMATIC DIAGRAM OF TACAN TRAINER**

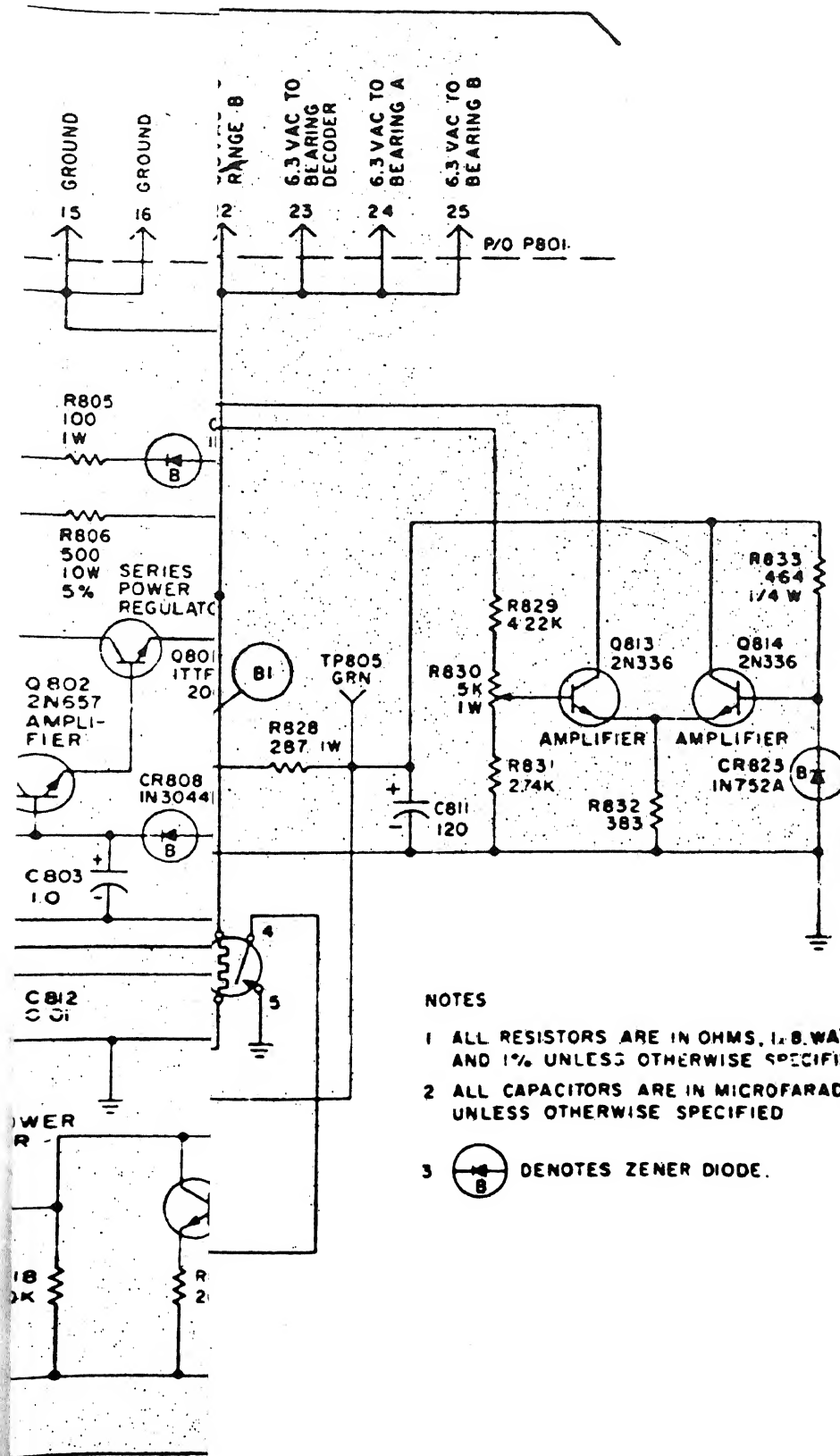
DATE: 3-1-70  
 CODE: 89297-916850C83108  
 SHEET: 11 OF 11

CONTRACTORS CODE IDENT 23259




776850C83109		SCHEMATIC																													
QTY REQD	PART OR IDENTIFYING NO	ITEM NO	CODE	DESCRIPTION	SHA	THICK	WIDTH	LENGTH	MATERIAL	MATL SPECIFICATION	ZONE																				
PART NUMBER MARKING PER MIL-STD-130 LOCATED												LIST OF MATERIALS																			
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .015 .03 .05 .10 .15 .20 .25 .30 .35 .40 .45 .50 .55 .60 .65 .70 .75 .80 .85 .90 .95 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 5.60 5.70 5.80 5.90 6.00 6.10 6.20 6.30 6.40 6.50 6.60 6.70 6.80 6.90 7.00 7.10 7.20 7.30 7.40 7.50 7.60 7.70 7.80 7.90 8.00 8.10 8.20 8.30 8.40 8.50 8.60 8.70 8.80 8.90 9.00 9.10 9.20 9.30 9.40 9.50 9.60 9.70 9.80 9.90 10.00 10.10 10.20 10.30 10.40 10.50 10.60 10.70 10.80 10.90 11.00 11.10 11.20 11.30 11.40 11.50 11.60 11.70 11.80 11.90 12.00 12.10 12.20 12.30 12.40 12.50 12.60 12.70 12.80 12.90 13.00 13.10 13.20 13.30 13.40 13.50 13.60 13.70 13.80 13.90 14.00 14.10 14.20 14.30 14.40 14.50 14.60 14.70 14.80 14.90 15.00 15.10 15.20 15.30 15.40 15.50 15.60 15.70 15.80 15.90 16.00 16.10 16.20 16.30 16.40 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99.50 99.60 99.70 99.80 99.90 100.00												CONTRACT NO. 776850C83109				HYDROSYSTEMS, INC.				FARMINGDALE, L.I., N.Y.				NAVAL TRAINING DEVICE CENTER				ORLANDO, FLORIDA			
REF 776850C83109												847				12				F 89297 776850C83109											
QTY REQD												QTY REQD				QTY REQD				QTY REQD											
PRT ASSY												PRT ASSY				PRT ASSY				PRT ASSY											
APPLICATION												APPLICATION				APPLICATION				APPLICATION											
SCALE												SCALE				SCALE				SCALE											
SHEET												SHEET				SHEET				SHEET											

CONTRACTORS CODE IDENT 23259



#### NOTES

- 1 ALL RESISTORS ARE IN OHMS, 1/8 WATT AND 1% UNLESS OTHERWISE SPECIFIED
- 2 ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED
- 3  DENOTES ZENER DIODE.





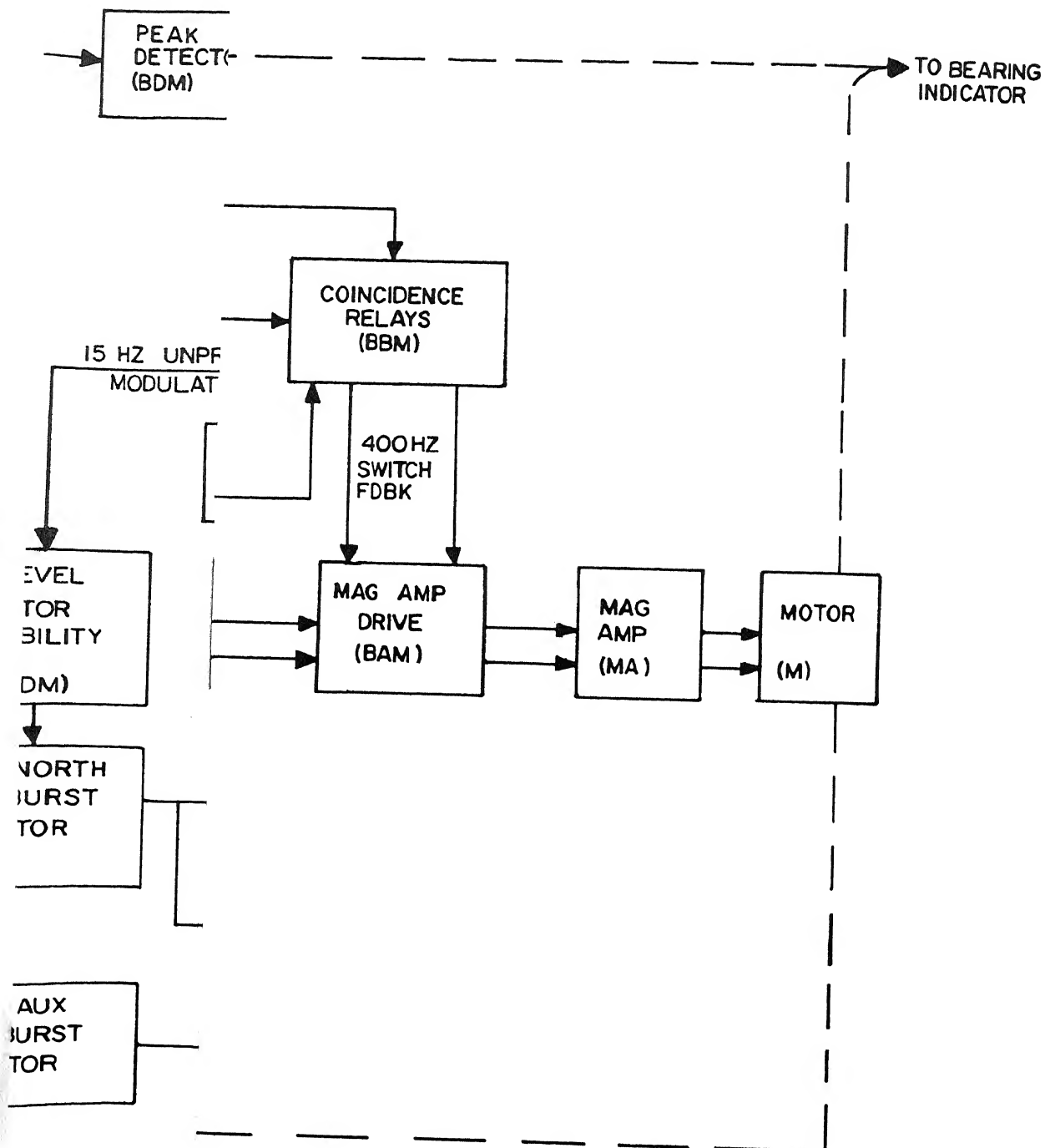
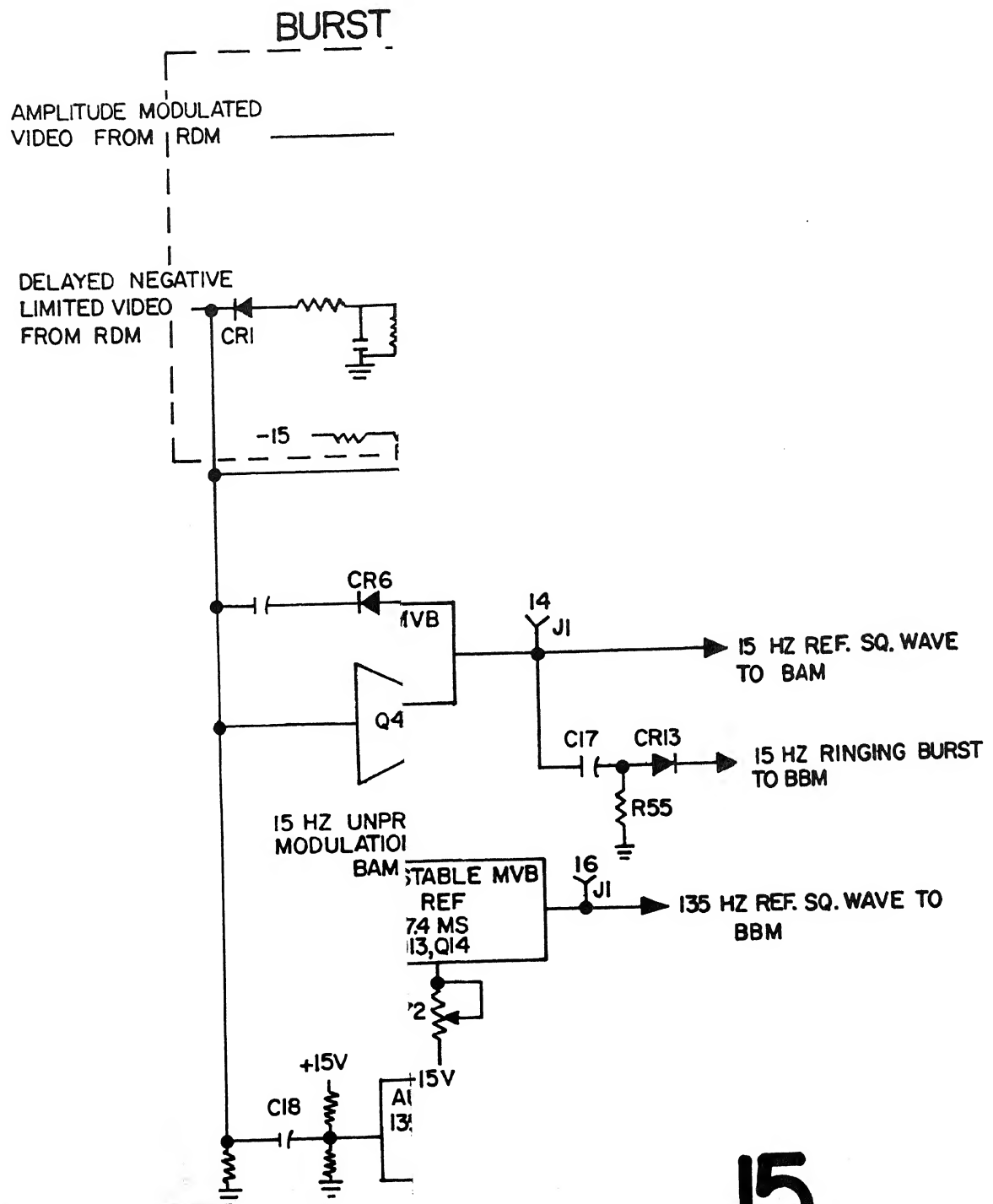


Figure 4-16. Bearing Subsystem, Functionfunctional Block Diagram

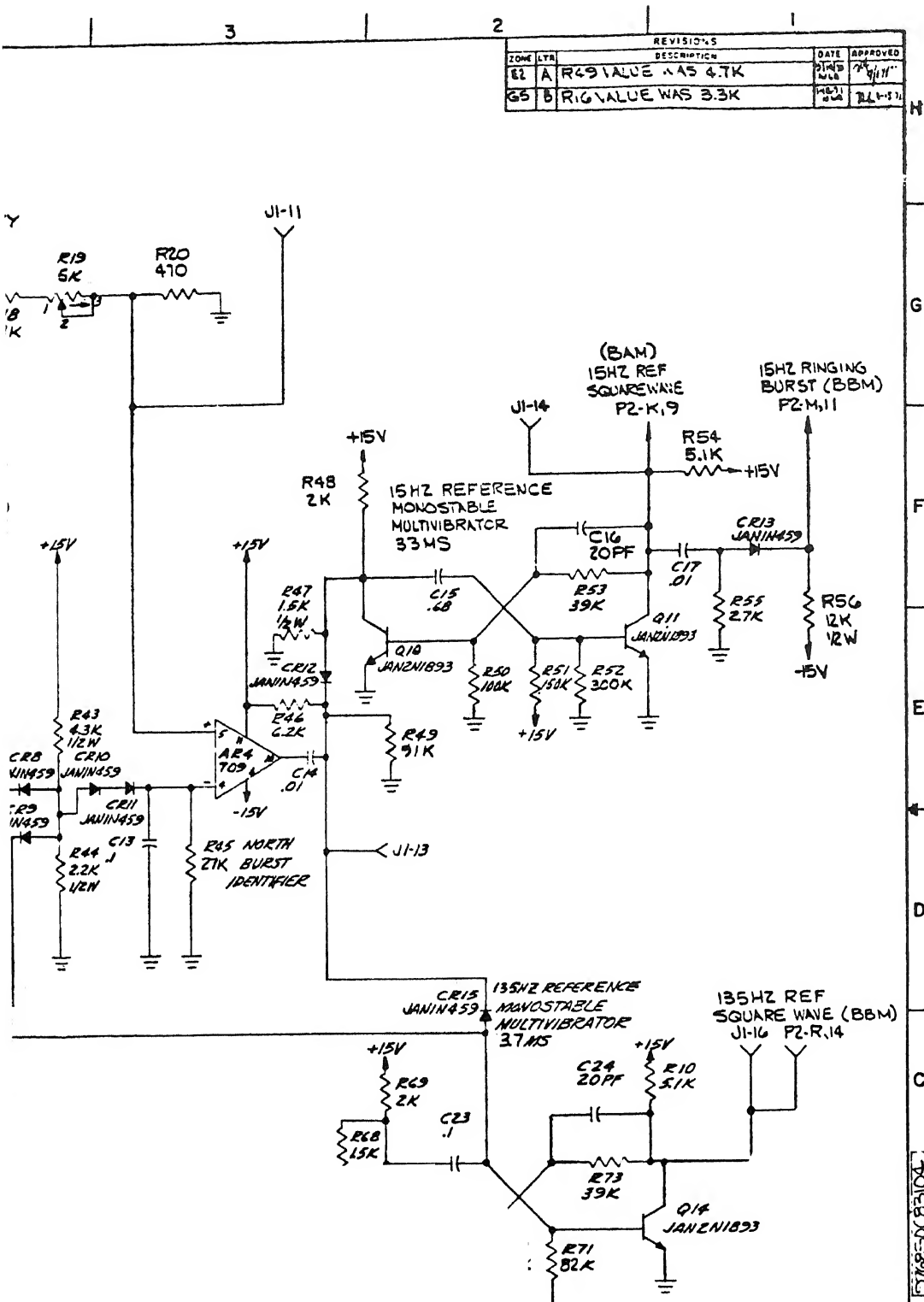
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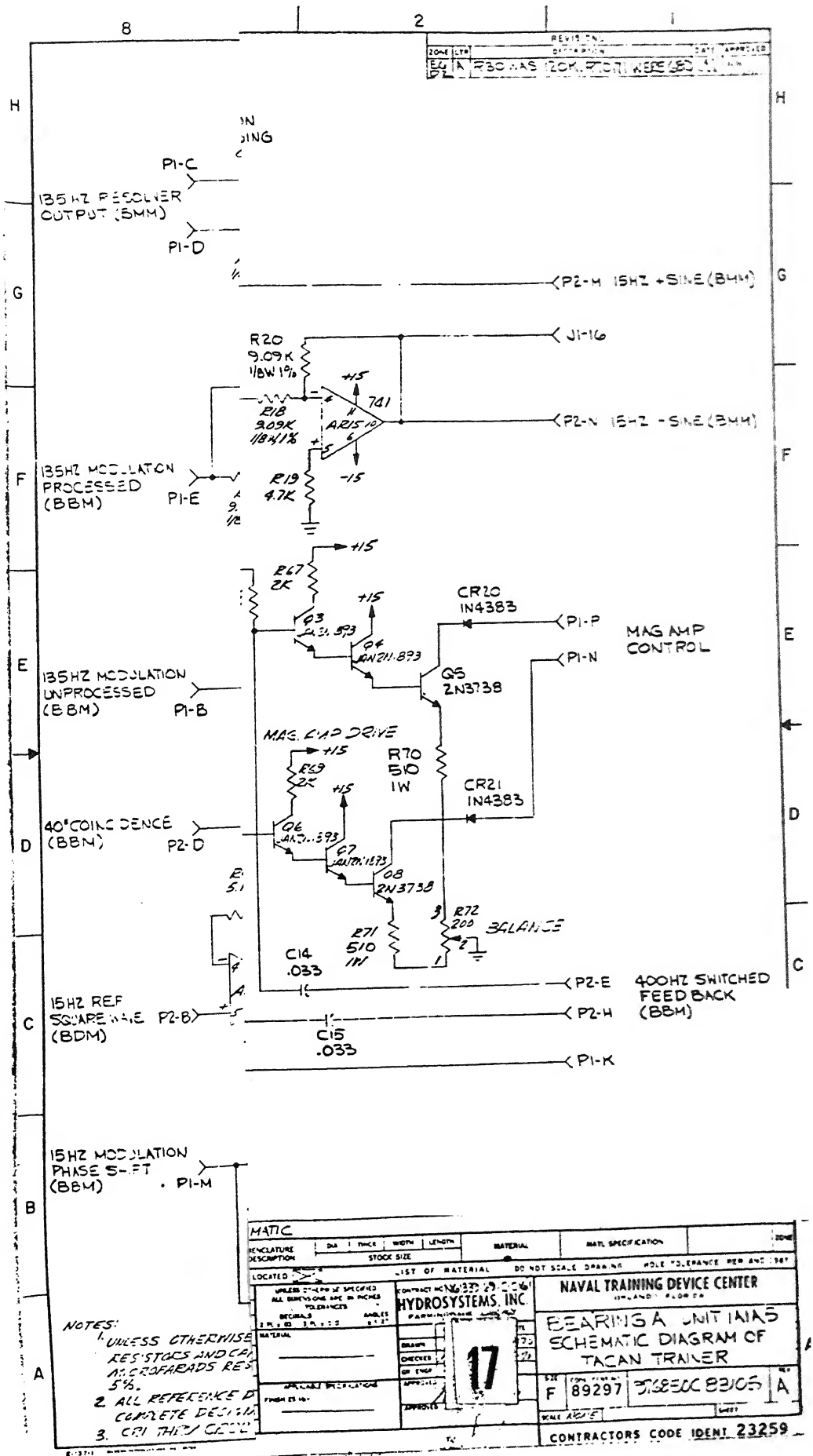


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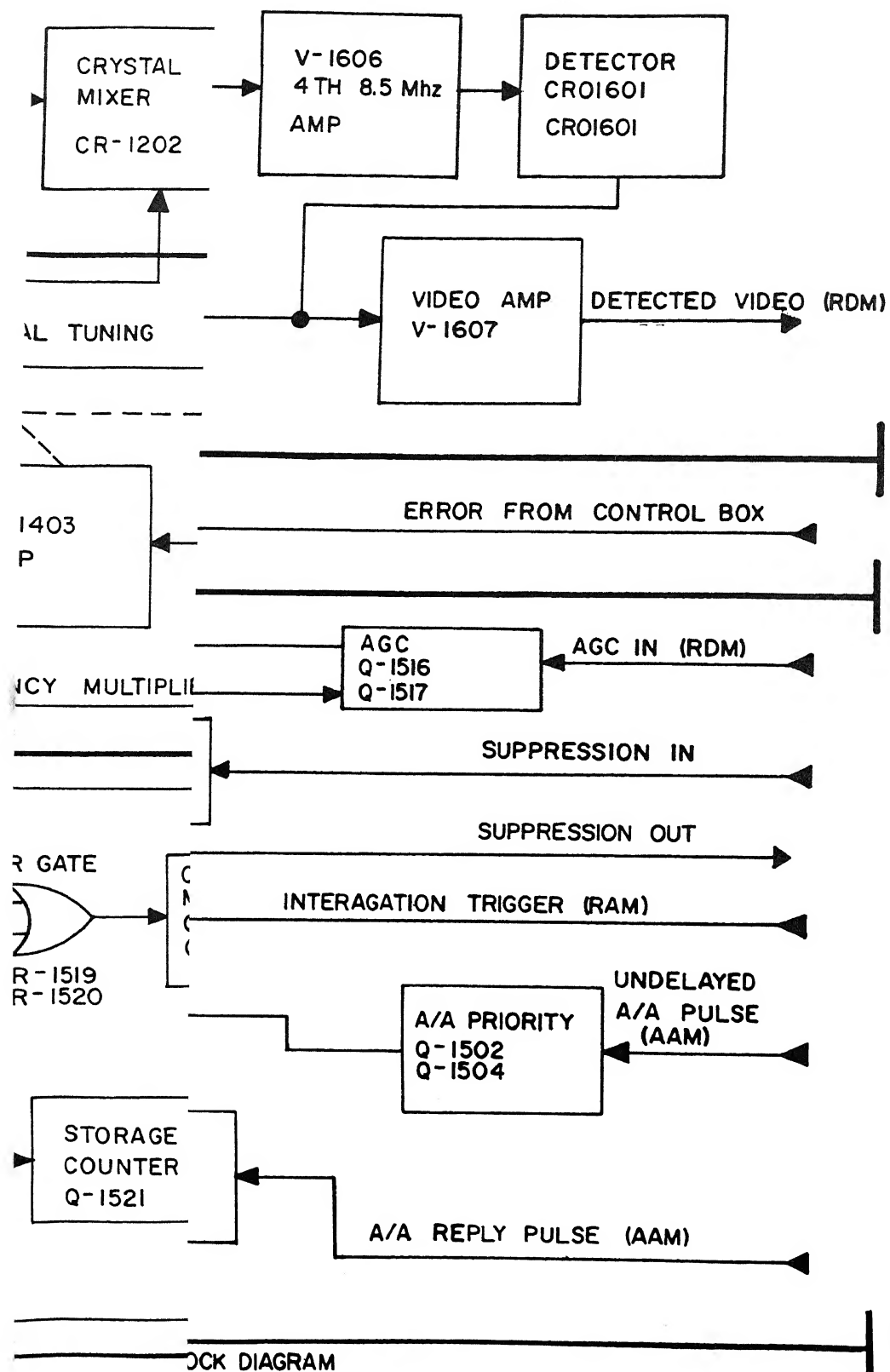
Figure 4-17. Bearing Decoder Module 1A1A4, Functional Block Diagram



MATERIAL		MATERIAL SPECIFICATION		ZONE
DO NOT SCALE DRAWING				
HOLE TOLERANCE PER ANSI 387				
<b>NAVAL TRAINING DEVICE CENTER</b> ORLANDO, FLORIDA				
<b>BEARING DECODER UNIT 1A1A4</b> <b>SCHEMATIC DIAGRAM OF</b> <b>TACAN TRAINER</b>				
F 89297		376850C83104		B
CONTRACTORS CODE IDENT 23259				





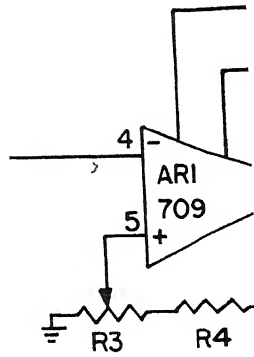






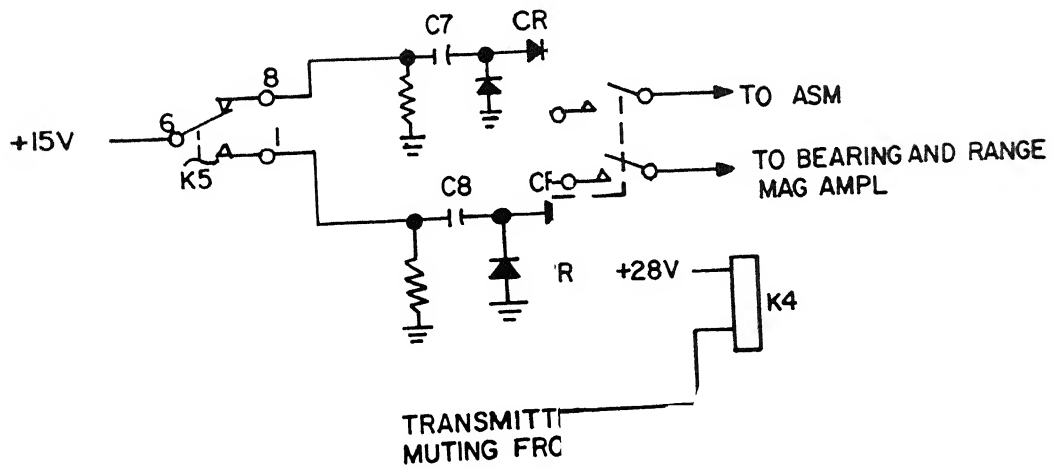
# A/A THRESHOLD AMPLIFIER

A/A COINCIDENCE  
(AMPLITUDE MODULATED  
VIDEO) FROM RDM)

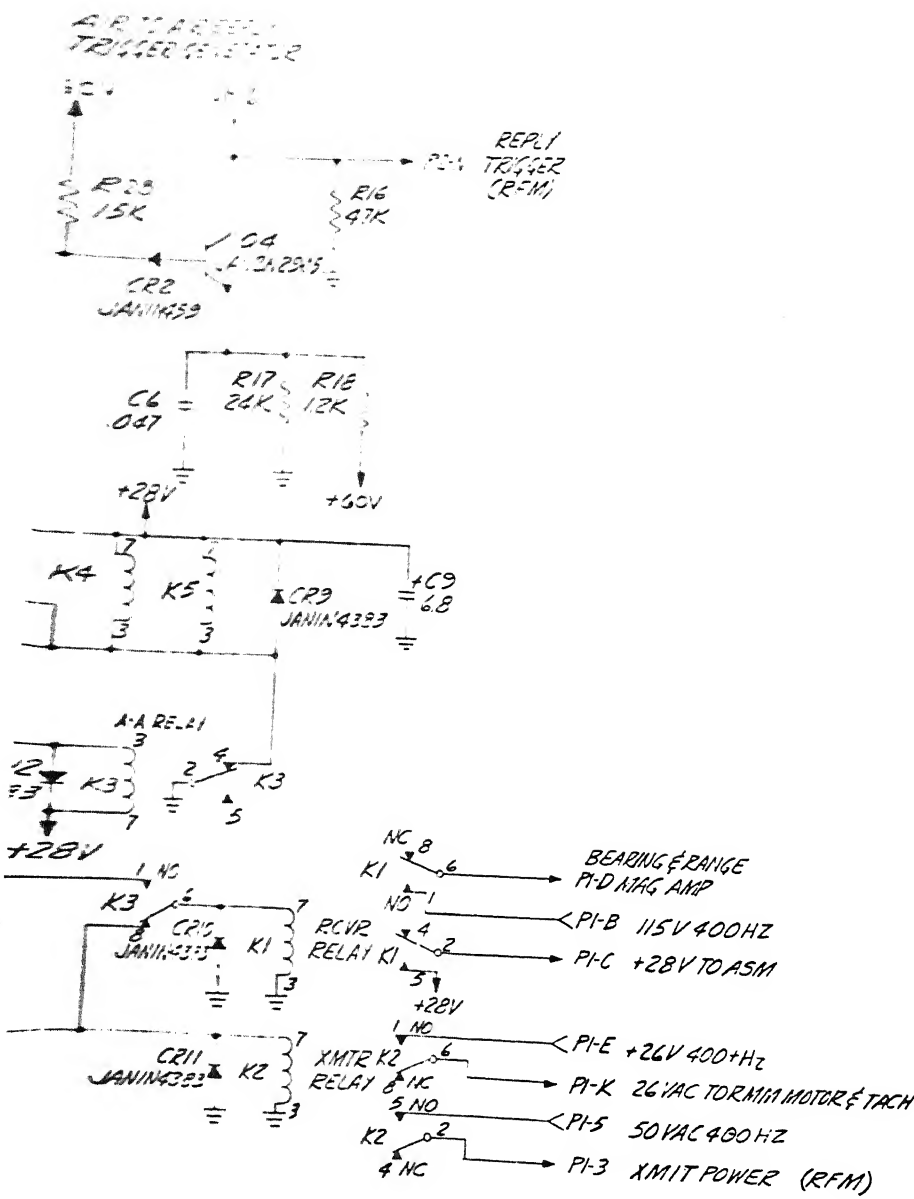


## MOTOR AND TACH

BLANKING<sub>2</sub> TO RFM



DATE	BY	REVISIONS	DATE APPROVED
12/1/54	1	REVISIONS	
12/1/54	2	CL. ACTION	
12/1/54	3	REVISIONS	
12/1/54	4	REVISIONS	
12/1/54	5	REVISIONS	
12/1/54	6	REVISIONS	
12/1/54	7	REVISIONS	
12/1/54	8	REVISIONS	
12/1/54	9	REVISIONS	
12/1/54	10	REVISIONS	



1976850C83107		SCHEMATIC									
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LIST OF MATERIAL											
DO NOT SCALE DRAWING											
HOLE TOLERANCE PER ANSI											
HYDROSYSTEMS, INC.											
NAVAL TRAINING DEVICE CENTER											
ORLANDO, FLORIDA											
AIR TO AIR UNIT/AAU											
SCHEMATIC DIAGRAM OF											
TACAN TRAINER											
21											
F 89297 1976850C83107											
SHEET											
CONTRACTOR CODE IDENT 23259											

